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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/027,101	12/20/2001	Richard Vernon Ford	6533/53662	9681

30505 7590 11/28/2007  
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EXAMINER
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DALENCOURT, YVES

ART UNIT	PAPER NUMBER
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2157

MAIL DATE	DELIVERY MODE
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11/28/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/027,101		FORD, RICHARD VERNON	
	<b>Examiner</b>		<b>Art Unit</b>	
	Yves Dalencourt		2157	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 18 September 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1, 5-7, 9-11, 13, 15-19, 23-26 and 33-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 5-7, 9-11, 13, 15-19, 23-26, and 33-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

This office action is responsive to amendment filed on 09/18/2007.

### ***Response to Amendment***

The Examiner has acknowledged the amended claims 1, 5, 6, 9, 11, 13, 15, 23, 24, and the cancellation of claims 2 – 4, 8, 12, 14, 20 – 21, 27 – 32, and 37.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1, 5, 6, 9, 11, 13, 15, 23, and 24 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 6 - 7, 9, 11, 13, 16 – 19, and 33 – 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baugher et al (US 5,634,006; hereinafter Baugher) in view of Barna et al (US 6,999, 449; hereinafter Barna), and further in view of Wesolek et al (US 6, 240,097; hereinafter Wesolek).

With reference to claims 1, 9, 11, and 33 - 34, Baugher shows a method comprising the steps of: monitoring the aggregate volume of network traffic generated by a plurality of users [See lines 47-51, column 5 for "Throughput."]; detecting a network utilization milestone relative to at least one of the users [See from line 47, column 7 to line 6, column 8 for accessing MIB, which results in the notification of a process of reaching a THRESHOLD]; and changing the configuration of the network device to affect a characteristic associated with access provided to the users) identified in the detecting step [See from line 47, column 7 to line 6, column 8. It addresses changing the bandwidth ("characteristic associated with the network access") at a node, in order to change the service characteristics]; allowing but degrading, only with respect to a predefined subset of traffic types, the network access provided to the first user identified in the detecting step [Again, see from line 47, column 7 to line 6, column 8. Decreasing the bandwidth is "degrading" network access]. Claim 9 adds the limitation of denying further network access to the first user identified in the detecting step only with respect to a predefined subset of traffic types step [See lines 25 column 8 to line 36, in which user bandwidths allocation may fail; the user network access would fail and their access would be denied in such instances].

Baugher shows substantially all the limitations, but fails to specifically show monitoring, over a given time interval, the aggregate volume of data transfer corresponding to each user of a plurality of users, wherein the given time interval spans at least one week.

Barna teaches an analogous system and method of monitoring and reporting accounting data based on volume which comprises the step of monitoring, over a given time interval, the aggregate volume of data transfer corresponding to each user of a plurality of users, wherein the given time interval spans at least one week (abstract; col. 1, lines 25 - 32; col. 3, lines 3 - 27; Barna teaches the idea that the PDSN then makes a Connection 33 between the MS 11 and the IP Network or Internet 13, and the session begins. Periodically, Accounting Interim messages 34 and 35 may be sent from the PDSN to the AAA Server reporting, at time interval "t", the volume of data utilized since the start of the accounting session. One skilled in the art recognized that having " a time interval spanning at least one week " as opposed to Barna's time interval "t", which can be for example, one minute, one hour, one week, one month, and so on would be an obvious variation in the art for the purpose of achieving the same end results).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Baugher by incorporating the idea of monitoring, over a given time interval, the aggregate volume of data transfer corresponding to each user of a plurality of users, wherein the given time interval spans at least one week as evidenced by Barna by setting the time interval "t" to one week as claimed for the purpose of monitoring and reporting accounting data in IP-based telecommunications networks that is based on volume, and accurately tracks the amount of data transferred during the handoff of a mobile user, thereby restricting amount of network traffic generated by individual users.

Baugher and Barna show substantially all the limitations, except for the idea of allowing but degrading, only with respect to “ **a predetermined subset of traffic types** ”.

Wesolek shows an analogous method and apparatus for data channelization and hardware-based network operation and control, which discloses the idea (col. 9, lines 57 through col. 10, line 8; col. 10, lines 32 - 46).

Thus, it would have been obvious to one of ordinary skill in the art at the invention was made to modify the teachings of Baugher and Barna by incorporating the idea of allowing but degrading, only with respect to a predetermined subset of traffic types as evidenced by Wesolek for the purpose of controlling and monitoring the use of network information or software application assets, thereby enhancing operating efficiencies by focusing groups or individuals on appropriate subject matter and enjoying greater economies and protection with respect to software application licenses.

With respect to claim 6, Baugher and Barna show all the limitations in claim 1, and Baugher further shows the step of notifying a user when the volume of traffic associated with the user approaches a network utilization milestone [See lines 63-65, column 8, in which a user is notified when his frame size (which is changed in accordance with QoS) exceeds the maximum\_frame\_size].

With respect to claim 7, Baugher, Barna, and Wesolek show all the limitations in claim 1, and Baugher further shows the detecting step comprises comparing the volume of traffic associated with a user over a given time interval against a threshold level  $\phi$  defining a network utilization milestone. [Again, see from line 47, column 7 to line 6,

column 8 and the discussion of throughput, which is the monitored QoS. See lines 47-52, column 5].

With respect to claims 13, 16, and 17, their limitations already have been discussed with claims 6 and 7, respectively.

With respect to claim 18, Baugher, Barna, and Wesolek show all the limitations in claim 11, and Barna further shows that the time interval is a fixed time interval (col. 6, lines 42 – 54).

With respect to claim 19, Baugher, Barna, and Wesolek show all the limitations in claim 1, and Baugher further shows that the time interval is a "sliding time interval." Baugher meets the limitation. Baugher refers to session; see col. 6, lines 12 – 54). The duration of session is not fixed. It can be viewed as "sliding" because of the duration of use constantly increases, and the duration of monitoring would change accordingly.

Claims 5, 10, 15, 22 – 24, 26, and 35 - 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baugher, Barna, and Wesolek in view of Amin et al, (Pub. No. 2002/0152319, Amin hereinafter). Amin incorporates U. S. Pat. No. 6,714,987, to Amin et al (Amin2 hereinafter) by reference.

With respect to claim 5, Baugher and Barna do not show the step of charging the first user identified in the detecting step for further network access, but Amin shows the affecting step comprises the step of charging the user(s) identified in the detecting step for further network access [See paragraphs 0177-0198 for charging QoS (e.g., allocating more bandwidth) and see paragraph 0010 for billing the users based on QoS].

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Baugher and Barna with the above features that Amin shows, because, as stated in paragraphs 0011 of Amin's disclosure, Amin's billing"[edited] feature is an advantage to the operator and allows for full compensation of network resource use.

With respect to claim 10, the limitations of such claim have been discussed with respect to claim 1, respectively, except that claim 10's limitations are cited in the context of "predefined set of traffic types." However, Amin illustrates predefined traffic types in paragraphs 0152-0154.

With respect to claims 15 and 22, their limitations have been discussed with respect to claims 5, 9-10, respectively.

In reference to claim 23, it cites the following limitations that have not yet been discussed with regard to claims mention above: registering a user at a network access device connected to a first computer network, the network access device including an IP address, and associating the IP address with the user [see Barna col. 5, line 25 through col. 6, line 56]; In addition, the claim 23 refers to "changing the configuration of the network." Baugher meets the limitation because Baugher changes bandwidth in response to network measurements, as discussed in claim 1.

Baugher, Barna, and Wesolek shows substantially all the limitations, but fail to show the step of providing the user access to a second computer network by changing the configuration of a network device in a communication path between the first



computer network and the second computer network [See paragraph 0031 for giving access to applications in the Internet].

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Baugher, Barna, and Wesolek with the above features that Amin shows in order to allow operator for full compensation of network resource use.

Claim 24 cites an apparatus facilitating the deployment of volume-based network policies across a first computer network, the first computer network comprising at least one traffic monitoring device operative to monitor the volume of network traffic generated by individual users, and at least one network control device operative to control access to a second computer network, comprising [The limitations have been discussed with respect to claim 23 and preceding claims] a user account database maintaining the respective volumes of network traffic generated by a plurality of users [See from line 65, column 18 to line 2, column 19, Amin2 The user database for sessions exists locally]; a data logging module operative to collect network utilization data from the traffic monitoring device and store the network utilization data in the user account database [the logging module is inherent in Amin2. Session data referred to from line 65, column 18 to line 2, column 19 exists only because the data have been logged]; a network usage monitor operative to scan the user account database to detect a network utilization milestone reached by a user based on the volume of network traffic associated with the user [See lines 35-57, column 19, Amin2, for instantiation of service session by user invocation. The instantiation involves scanning the database. Note that the instantiated user account information is then used later for

QoS service requirements]; modify the configuration of the network control device to affect a characteristic of access to the second computer network for the user [The limitation has been discussed with respect to preceding claims 1-23].

With respect to claim 26, Amin2 teaches the apparatus, in response to registration of a new user, is operative to modify the configuration of the network control device to allow access to the second computer network for the new user. See from line 53, column 15 to line 10, column 16 for path selection when a "new" user is "registered."

With respect to claims 35 - 36, their limitations have been discussed with respect to claims 23 and 24, respectively.

Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baugher, Barna, Wesolek, and Amin as applied to claim 25 above, and further in view of Makuck.

With respect to claim 25, Baugher, Barna, Wesolek and Amin do not show comprising a user interface module operative to register new users and create corresponding user accounts in the user account database. However, Makuck meets the limitation in paragraphs 0149-0151 and Fig. 8. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a user interface as cited in Makuck for creating new user account, because the combination of Baugher, Barna and Amin would not be able to create with new user account and thus service new users. The creation of new user accounts must occur prior to servicing users; otherwise, there would not be able to service users based on QoS.

### **Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yves Dalencourt whose telephone number is (571) 272-3998. The examiner can normally be reached on M-TH 7:30AM - 6: 00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

November 25, 2007

  
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